

6. Radioactive Material Data

Regulation: 180 NAC 3-014

Criteria: *Licensees will only be authorized for sealed sources and devices registered by an Agreement State or the NRC.*

Agreement States and the NRC perform safety evaluations of gauges before authorizing manufacturers to distribute the gauges to specific licensees. The safety evaluation is documented in a Sealed Source and Device (SSD) Registration Certificate, also called an SSD Registration Sheet. Each sealed source to be used in a given gauge or device should be specified by isotope (for example, cesium-137, americium-241, etc.) manufacturer and model number of the device, Sealed Source and Device Catalog manufacturer number and model number of each source and activity in either millicuries or microcuries.

Response from applicant:

- **Item 6.a:** Identify each radionuclide that will be used in each source in the gauging device(s).
- **Item 6.b:** Identify the manufacturer and model number of each sealed source that will be used in the gauging device or x-ray fluorescence analyzer. Confirm that each sealed source, device, and source/device combination is registered as an approved sealed source or device by NRC or an Agreement State, and state Sealed Source and Device Catalog number.
- **Item 6.c:** Specify the maximum amount of radioactive material that will be in each sealed source. Confirm that the activity per source will not exceed the maximum activity listed on the approved Sealed Source and Device registration issued by NRC or an Agreement State.
- **Item 6.d:** Specify the purpose for use of the gauging device. For example, a moisture-density gauge is normally used for measuring moisture and density of construction materials. **AND** Identify the manufacturer and model number of the gauging device in which the sealed sources will be used.

Note: The NRC maintains the National Sealed Source and Device Registry (NSSDR). The Registry is a collection of registration certificates for sealed sources and devices which contain sealed sources. The registration certificates contain detailed information on the sources and devices, such as how they are permitted to be distributed and possessed (specific license, general license, or exempt), design and function, radiation safety, and limitations on use. The Registry of Sealed Source and Device is available electronically at <http://www.hsrdr.ornl.gov/nrc/ssdr/ssdrindx.htm>.

Financial Assurance and Record Keeping for Decommissioning

Regulations: 180 NAC 3-017.02, 180 NAC 3-018.

Criteria: *Portable gauge licensees possessing sealed sources containing radioactive material in excess of the limits specified in 180 NAC 3-018 must provide evidence of financial assurance for decommissioning.*

Licensees are required to maintain, in an identified location, decommissioning records related to structures and equipment where gauges are used or stored and maintain records about any unusual occurrences (e.g. leaking sources or other indicants that involve spread of contamination). Licensees must transfer these records important to decommissioning either to the new licensee before licensed activities are transferred or assigned in accordance with 180 NAC 3-017.02 or to the Agency before the license is terminated.

The requirements for financial assurance are specific to the types and quantities of byproduct material authorized on a license. Most portable gauge applicants and licensees do not need to comply with the financial assurance requirements because the thresholds for sealed sources are 3.7×10^6 gigabecquerels (100,000 curies) of cesium-137 or 3.7×10^3 gigabecquerels (100 curies) of americium-241 or californium-252. Thus, a licensee would need to possess hundreds of gauges (typically containing about 0.30 gigabecquerels (8 millicuries) of cesium-137 and 1.5 gigabecquerels (40 millicuries) of americium-241) before the financial assurance requirements would apply. Since the standard portable gauge license does not specify the maximum number of gauges that the licensee may possess (allowing the licensee flexibility in obtaining gauges as needed without amending its license), it contains a condition requiring the licensee to limit its possession of gauges to quantities not requiring financial assurance for decommissioning. Applicants and licensees desiring to possess gauges exceeding the threshold amounts must submit evidence of financial assurance.

Note: For portable gauge licensees whose sources have never leaked, acceptable records important to decommissioning are sketches or written description of portable gauge storage or use locations specifically listed on the license. Similar information need not be maintained for temporary job sites.

Response from applicants: No response is needed from most applicants. If financial assurance is required, submit evidence.